

Field Notes

In an effort to share some of the natural history observations made during the spring bottom trawl survey, we have requested that the Chief Scientists on each part of the cruise comment on some of the more interesting catches that were brought aboard the *FRV ALBATROSS IV*.

Cold Temperatures Affect Fish Distribution

March felt more winter-like than the winter survey in February. Temperatures were often below zero, and it seemed as though we had a straight week of snow squalls at one point. The water seemed colder than normal, which was expected with such an unusually intense winter.

Large elasmobranchs such as stingrays and some of the larger toothed sharks (non-dogfish) were well "around the corner" below Cape Hatteras. We captured the second blacknose shark that I have seen in my years on the survey.

The spiny dogfish distribution followed the winter survey in that they were encountered all the way out to 366 meters. What was also interesting was that they were encountered all the way inshore to our shallowest stations as well. It didn't seem as though we caught as many liner-tearing giant dog tows, but rather a steady presence of dogfish seemed to be everywhere. The inshore tows had many fewer dogfish than the offshore tows.

Offhand, the southern and mid-Atlantic parts of the cruise were not as interesting as past years in terms of fish diversity. In the absence of any hard examination of the data, most people chalked this up to an unusually cold year. Whatever the reasons, from a "weird fish" lover's standpoint, it was a very monotonous assemblage of species.

Another Record Year for Haddock!

The NEFSC spring bottom trawl survey captured an average of 112 age-one haddock per tow on Georges Bank - the highest ever recorded during the 37 years of the spring survey. The catch rate of the 2003 haddock year class was about 50 percent higher than the previous record, and over 20 times the average during 1968-2002. The previous catch-per-tow record of age-one fish was 81 fish per tow in 1976. The 1975 Georges Bank haddock year class was the largest cohort (103 million age-1 fish) observed since 1963.

A Gathering of Cats

An unusual capture of multiple and large Atlantic wolffish occurred on the Northern Edge of the Georges Bank cruise. Usually a solitary animal (except during the breeding season), five fish weighing a total of 100 pounds were caught at one station in 40 fm (73 m) of water; the smallest was 34 inches (85 cm) and the largest was 42 inches (107 cm). There have only been three other tows on Georges where more fish of the same size have been caught and only five other tows that have weighed more since the spring surveys began in 1968. Our time series shows the size of fish that we've caught in the spring range from 2-54 inches (4-137 cm). Atlantic wolffish are currently a "species of concern" in Atlantic Canada due to declining populations.

These fish are very distinctive in shape (a stout, eel-like body), blunt head and heavy jaws. When

wolffish come aboard, the scientists are careful to keep their fingers gloved and away from the fish's canine-like and three rows of crushing teeth which are primarily used to grind and consume crabs, starfish, sea urchins and shellfish. Bigelow and Schroeder (1953), indicate that wolffish are renowned for their bad temperament and biting ability as they have been seen to easily bite through broom handles. It's interesting to note that because their teeth are worn down from the types of food that they eat, they lose all of their teeth annually (from September to December) and must fast during the time while their teeth are being replaced (which also coincides with their spawning period). Their flesh is edible (marketed as ocean catfish) and their grey skin with dark bars is tough enough to be tanned into leather.

Bigger Halibut

Several large Atlantic halibut specimens were caught in the Gulf of Maine. While small halibut are commonly taken during the survey, we typically do not see larger specimens brought aboard. At station 293 near the mouth of St. Mary's Bay, Nova Scotia, two large halibut were caught: one weighed in at 28 lbs (12.9 kgs), and the other at 51 lbs (23.23 kgs). We caught another good sized halibut at station 299 in the Jordan Basin area that weighed 19 lbs (8.44 kgs). Since full grown (female) Atlantic halibut average around 132 lbs (60 kgs) and there are records of fish taken over 660 lbs (300 kgs), this spring's survey fish were certainly not large by halibut standards. We also want to note that a Massachusetts recreational angler targeting cod landed an Atlantic halibut in excess of 200 lbs earlier this spring.

John Galbraith
Chief Scientist
Survey Parts I & II
508-495-2392
John.Galbraith@noaa.gov

Linda Despres
Chief Scientist
Survey Part III
508-495-2346
Linda.Despres@noaa.gov

Peter Chase
Chief Scientist
Survey Part IV
508-495-2348
Peter.Chase@noaa.gov